

**Material Safety Data Sheet - according to directive 91/155/EWG****INTERNATIONAL STANDARD NORM ISO 11014-1**

| Trade Name: SC  | Solder wire S-Sn99.3 Cu0.7<br>DIN EN 29 453  | Flux F-SW 34<br>NF EN 29 454.1 |
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| 1.) <b><u>Manufacturer:</u></b><br><b><u>Address:</u></b>   | EDSYN GMBH EUROPA<br>Finkenweg 2                      Tel.: 09342 - 6413<br>D 97892 Kreuzwertheim      Fax: 09342 - 6417   |                                |
| 2.) <b><u>COMPOSITION / INFORMATION ON INGREDIENTS</u></b><br><br>2.1 Hazardous ingredients:<br><br>2.2 Representative hazardous ingredients:<br><br>2.3 Other hazardous ingredients:<br><br>2.4 Substances present at a concentration below the minimum danger threshold:<br><br>2.5 Other substances with occupational Exposure Limit Values: | Labelled with the R phrases given in section 3.<br><br>Not applicable<br><br>Not known substance of this category is present.<br><br>-<br><br>CAS 7440-31-5    TIN METAL<br>CAS 7440-8        COPPER METAL   |                                |
| 3.) <b><u>HAZARDS IDENTIFICATION</u></b><br><br>3.1 Risk phrases:   | This product is not classified as flammable. See the recommendations concerning the other products in the room.<br>This product is stable.<br><br>R 36    Irritating to eyes.  |                                |
| 4.) <b><u>FIRST AID MEASURES</u></b><br><br>Dusts and fumes:<br>4.1 In case of exposition by inhalation:<br><br>4.2 In case of skin contact:<br><br>4.3 In case of ingestion:<br><br>4.4 In case of eye contact:  | In case of large quantities inhaled, remove from the exposure area.<br>Wash nose and lips.<br><br>Wash with water and soap.<br><br>Seek medical advice.<br><br>Flush thoroughly with clear water.<br>In case of persisting irritation seek an ophthalmologist. |                                |
| 5.) <b><u>ACCIDENTAL RELEASE MEASURES</u></b><br><br>5.1 Suitable extinguishing media:<br><br>5.2 Extinguishing media which must not be used:   | Solder wires Sn 99.3 Cu 0,7 are not flammable.<br><br>No specific agent, use the suitable media appropriate for surrounding material.<br><br>Water on liquid metal.  |                                |



28. Juni 2007

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| <p><b>5.3 Special exposure hazards:</b></p> <p><b>5.4 Special protective equipment for fire fighters:</b></p>  | <p>Inhalation of toxic fumes.</p> <p>Wear a self-contained breathing apparatus.</p>  |
| <p><b>6.) <u>ACCIDENTAL RELEASE MEASURES</u></b></p> <p><b>6.1 Individual precautions:</b></p> <p><b>6.2 Precaution for protecting the environment:</b></p> <p><b>6.3 Methods for cleaning up:</b></p>   | <p>Refer to the protection measures listed in sections 7 &amp; 8.</p> <p>Collect the product.</p> <p>Not relevant due to the massive form of the product.</p>  |
| <p><b>7.) <u>HANDLING AND STORAGE</u></b></p> <p><b>7.1 Handling:</b></p> <p><b>7.2 Storage:</b></p> <p><b>7.3 Materials of packaging:</b></p>   | <p>Set up a dust, fumes or vapour collection system at the point of emission. Use closed or hood covered systems for thermal operation.</p> <p>Avoid the possibility of contact with acids.</p> <p>Recyclable</p>  |
| <p><b>8.) <u>EXPOSURE CONTROL/INDIVIDUAL PROTECTION</u></b></p> <p><b>8.1 Respiratory protection:</b></p> <p><b>8.2. Hand protection:</b></p> <p><b>8.3 Eye protection:</b></p> <p><b>8.4 Skin protection:</b></p> <p><b>8.5 Hygiene measures:</b></p>                 | <p>Respiratory mask with cartridges in case of punctual intervention.</p> <p>Appropriate gloves.</p> <p>Safety glasses or facial shield (if ejection's may occur).</p> <p>Appropriate protective clothing.</p> <p>Strict hygiene requirements will be prescribed at the workplace.</p> |
| <p><b>9.) <u>PHYSICAL AND CHEMICAL PROPERTIES</u></b></p> <p><b>Physical state:</b></p> <p><b>PH:</b></p> <p><b>Density (alloy):</b></p> <p><b>Melting point (alloy):</b></p> <p><b>Melting point (Flux):</b></p> <p><b>Explosivity:</b></p> <p><b>Solubility:</b></p> | <p>Wires</p> <p>Not applicable</p> <p>7.3 Kg/dm<sup>3</sup> at 20° C</p> <p>227° C</p> <p>80 to 100° C</p> <p>Not concerned</p> <p>Insoluble in water</p> <p>Soluble in acetic acid in nitric acid, in hot concentrated sulphuric acid.</p>  |
| <p><b>10.) <u>STABILITY AND REACTIVITY</u></b></p> <p><b>Conditions to avoid:</b></p> <p><b>Hazardous decomposition products:</b></p>  | <p>The product is stable in normal conditions.</p> <p>Mechanical and thermal operations giving risk to dusts or fumes without appropriate ventilation.</p> <p>Not applicable</p>   |



28. Juni 2007

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| <p>11.) <b><u>TOXICOLOGICAL INFORMATION</u></b></p>   | <p>The product under its final form is not concerned.</p> <p>An accurate intoxication by ingestion or skin contact is not to be feared.</p>  |
| <p>12.) <b><u>ECOLOGICAL INFORMATION</u></b></p> <p><b>Mobility:</b></p> <p><b>Persistence/degradability:</b></p> <p><b>Water pollution:</b></p> <p><b>AOX-Data:</b></p>  | <p>Not applicable</p> <p>Sn/Cu alloy is a particularly corrosion proof metal.</p> <p>No data available.</p> <p>Containing the chemical formula of heavy metals (refer to legal rules 76/464/CEE).</p>  |
| <p>13.) <b><u>DISPOSAL CONSIDERATIONS</u></b></p> <p><b>Surplus and wastes:</b></p> <p><b>Contaminated packaging:</b></p>   | <p>Collect all wastes.</p> <p>Never use packaging for another purpose.</p>   |
| <p>14.) <b><u>TRANSPORT INFORMATION</u></b></p> <p><b>Regulations:</b></p> <p><b>Class:</b></p> <p><b>UN number:</b></p> <p><b>Danger code:</b></p> <p><b>Packing group:</b></p> <p><b>FS:</b></p> <p><b>Marine pollutant:</b></p> <p><b>Label:</b></p> <p><b>Proper shipping name:</b></p> | <p><b>Land transport                      Maritime transport                      Air transport</b></p> <p>NOT CLASSIFIED AS DANGEROUS GOODS BY ANY INTERNATIONAL CODES OR AGREEMENTS (ADR/IMDG/IATA).</p>   |
| <p>15.) <b><u>REGULATORY INFORMATION</u></b></p> <p><b>Regulatory applicable to member states of the European Community:</b></p> <p><b>Classification, labelling directive 67/548/CEE:</b></p> <p><b>R-Phrases:                      R 36</b></p> <p><b>S-Phrases:</b></p>                  | <p>Not classified</p> <p>-</p> <p>Irritating to eyes</p> <p>Not applicable</p>   |
| <p>16.) <b><u>OTHER INFORMATION</u></b></p>   | <p>The relevant data sheet is applicable here.</p> <p>The information contained here in is based on data considered accurate and is offered at no charge.</p> <p>Our aim, by providing the above information which reflects the current status of our knowledge and experience is to describe our product in terms of safety requirements.</p> <p>Liability is expressly disclaimed for loss or injury arising out of use of this information or the use of any materials designated.</p> <p>Supplementary copies of this data sheet are available on request.</p> |

# EDSYN GMBH EUROPA

Zentrum für Löt- und Entlötsysteme



EDSYN GMBH EUROPA, Postfach 1169, D-97888 Kreuzwertheim

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28. Juni 2007